

CLAIM AMENDMENTS

Claims 1-8.(Cancelled)

9.(Withdrawn) An apparatus for the manufacture of concrete pipes by the method according to claim 1 or 2, where the applicator is formed by a core (4) which is intended to be moved in its longitudinal direction into the outer form (3), an upper end of said core (4) being provided with one or more annular grooves (14) characterised in that a further material with a greater density is supplied through one or more annular grooves to form an inner layer of greater density in the pipe structure during vibration from a vibrator (12) placed inside the core (4).

10.(Withdrawn) An apparatus for the manufacture of concrete pipes by the method according to claim 1 or 2, where the applicator is formed by a core (4) which is intended to be moved in its longitudinal direction into the outer form (3), an upper end of said core (4) being provided with a plurality of nozzles or gaps arranged at a short distance from each other in one or more grooves (14) along the circumference of the core (4), characterised in that a further material with a greater density is supplied through said plurality of nozzles or gaps to form an inner layer of greater density in the pipe structure during vibration from a vibrator (12) placed inside the core (4).

11.(Withdrawn) An apparatus for the manufacture of concrete pipes by the method according to claim 1 or 3, characterised in that the applicator is formed by a core (4) which is intended to be rotated during forming or is rotated at completed forming, and that the core (4) is provided with one or more grooves (14), said grooves (14) being arranged such that they extend in the longitudinal direction of the core (4) in one or more rows.

12.(Withdrawn) An apparatus according to claim 11 for the manufacture of concrete pipes by the method according to claim 1 or 3, characterised in that the groove or grooves (14) extend in a straight line in the longitudinal direction of the core (4).

13.(Withdrawn) An apparatus according to claim 11 for the manufacture of concrete pipes by the method according to claim 1 or 3, characterised in that the groove or grooves (14) extend in a form of a spiral along the surface of the core (4) from one end of the core toward or to the other end of the core (4).

14.(Withdrawn) An apparatus for the manufacture of concrete pipes by the method according to claim 1 or 4, wherein the rotor (10) is arranged on the front of the core (4) relative to the direction of travel of the core (4), and that the rotor (10) is provided with supply means (14) characterised in that the further material is supplied to the inner surface of the pipe (2) through the supply means (14) during vibration from a vibrator (12) placed inside the core.

15.(Withdrawn) An apparatus according to claim 14 for the manufacture of concrete pipes by the method according to claim 1 or 4, characterised in that the supply means (14) provided on the rotor (10) are configured as nozzles and/or gaps.

16. (Cancelled).

17.(Cancelled).

18.(Cancelled).

19.(Withdrawn-Currently Amended) The method of claim 46 25 further comprising forming the inner mould part or core (4) with one or more supply openings (14) along the circumference of the core (4) at an upper end of the core (4) for the supply of the further material thereto.

20.(Withdrawn-Currently Amended) The method according to claim 46 25 wherein the applicator is in a form of a rotor (10), the rotor having one or more supply openings (14) provided in a part of the rotor (10) which faces away from a direction of travel of the rotor (10).

21.(Cancelled).

22.(Cancelled).

23.(Cancelled).

24.(Cancelled).

25. (New) A method for manufacturing a lined concrete pipe comprised of an outer concrete layer and an inner liner layer composed of a further material which forms a greater density inner surface liner, said method comprising:

providing an outer mould part and a core, a space formed between the outer mould part and the core having a shape of the lined concrete pipe,

providing an applicator for delivering concrete for forming the lined concrete pipe, the applicator located at a top of the core, the applicator and core being vertically movable upwardly within the outer mould part,

feeding concrete to the applicator as the applicator and core move upwardly within the outer mould part for filling the space with concrete,

providing the applicator with one or more supply openings positioned for delivering the further material below the concrete supplied by the applicator to the space,

vibrating the concrete filling the space between the outer mould part and the core for maintaining the concrete in a fluid phase as the concrete is filling the space while simultaneously supplying the further material through the supply openings of the applicator for merging the further material with the adjacent fluidized concrete, and

at least partially rotating the applicator and the core during delivery of the concrete and further material for merging the further material with the concrete adjacent the applicator to provide a mutually denser structural liner with a tight bond between the concrete and further material, thereby forming an integral liner with the concrete pipe, providing a greater density surface on at least a portion of an inner surface of the concrete pipe.

26.(New) The method of claim 25 wherein the applicator is integrally formed with the core or by an applicator unit in direct connection with the core.

27.(New) The method according to claim 25, 26 and 19-20 further comprising delivering the further material for applying an inner layer to a bottom ring and/or a top ring and then applying said ring or rings to the core and the outer mould part.

28.(New) The method according to claims 25, 26 and 19-20 further comprising delivering the further material for applying the inner layer to a bottom ring and/or a top ring when said ring or rings have been connected with the core and outer mould part and before the space is filled with concrete.

29.(New) The method according to claims 25, 26 and 19-20 wherein the pipe has a spigot end, and further comprising delivering the further material for applying an inner layer to the spigot end, lifting a top ring or a profile ring, filling the further material over the spigot end of the pipe, and then lowering/pressing down the profile ring over the spigot end simultaneous with or immediately following vibration.

30.(New) The method according to claim 25 wherein the further material is delivered in the form of a paste, powder or liquid.